DEC. 23. 2004 11:17AM JENKINS & WILSON NO. 861 P. 8/16

Serial No.: 09/938,712

## IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A system for storing and integrating <u>biological</u> data entries into a biological data warehouse comprising: a loader module which receives <u>the biological</u> data in a transitional format <u>in a plurality of different data types from a plurality of biological data sources</u>, converts the transitional format into formatted data, and stores the formatted data in a <u>biological</u> data warehouse.

- 2. (Original) The system of Claim 1, wherein the transitional format comprises a markup language used to represent the data entries.
- 3. (Original) The system of Claim 2, wherein the markup language transforms said data entries into an application and platform-independent form.
- 4. (Original) The system of Claim 3, wherein the markup language comprises extensible markup language definitions.
- 5. (Original) The system of Claim 1, wherein the transitional format is converted into a database-compatible language.
- 6. (Original) The system of Claim 5, wherein the database-compatible language comprises SQL statements.
- 7. (Original) The system of Claim 1, further comprising a graph generator for generating a data warehouse graph.
- 8. (Original) The system of Claim 7, wherein said data warehouse graph is used to represent the schema of said data warehouse, wherein said data entries may be processed in a logical order.

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- 9. (Original) The system of Claim 1, further comprising a data verifier for comparing said data entries with data present in said data warehouse.
- 10. (Original) The system of Claim 9, wherein said data verifier is configured to populate incomplete data entries by retrieving the missing information from the data warehouse.
- 11. (Original) The system of Claim 1, further comprising a key generator wherein primary and foreign database keys are created within said data warehouse.
- 12. (Original) The system of Claim 1, further comprising a file splitter for splitting large data files to facilitate easier loading of complex data files.
- 13. (Currently amended) A method for storing and integrating biological data into a biological data warehouse comprising the steps of:
  - a. receiving <u>biological</u> data in a transitional format, <u>wherein the biological</u>

    <u>data comprises a plurality of different data types from a plurality of biological data sources;</u>
  - b. converting said biological data into a database-compatible language; and
  - c. storing said database\_compatible language in a biological data warehouse.
- 14. (Original) The method of claim 13, including the further step of integrating mapping information into the formatted data.
- 15. (Original) The method of claim 14, wherein said mapping information is a mapping file.
- 16. (Original) The method of claim 14, wherein said mapping information is embedded within said transitional formatted data.

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- 17. (Original) The method of claim 13, wherein said transitional format comprises extensible markup language definitions.
- 18. (Original) The method of claim 13, wherein said database-compatible language comprises SQL statements.
- 19. (Currently amended) A system of loading <u>biological</u> information into a database comprising:
  - a. translating means for converting <u>biological</u> data <u>comprising a plurality of</u>

    <u>different data types from a plurality of biological data sources</u> from a

    transitional format into a database-compatible language;
  - b. mapping means for corresponding said <u>biological</u> data with data present in said database; and
  - c. loading means for storing data into said database.

Please add the following new claims:

- 20. (New) The method of claim 13, wherein the biological data comprises data selected from the group consisting of sequence data, biological assay data, experimental data, chemical structure data, gene expression data, and combinations thereof.
- 21. (New) The method of claim 13, wherein the different data types are non-uniform data types.
- 22. (New) The method of claim 13, wherein the converted biological data is in a uniform data type.